

Comparisons of Job Characteristics

Focus Occupation: **Machinists (51-4041)**

Associated Occupation: **Maintenance Workers, Machinery (49-9043)**

[Compare Knowledge](#)

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| | |
|----|--|
| << | Focus occupation element is much lower |
| < | Focus occupation element is lower |
| 0 | Focus occupation element is at a similar level |
| > | Focus occupation element is at a higher level |
| >> | Focus occupation element is at a much higher level |

Knowledge

Similarity of Focus Occupation to Associated Occupation: 81

Focus Occupation: Machinists (51-4041)

Associated Occupation: Maintenance Workers, Machinery (49-9043)

| Associated Occupation's Key Knowledge Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | | Evaluation of Focus Occupation |
|--|---------------------------------|--------------------------------|---------------------------|----|---|
| Mechanical | 6.8 | 21.8 | 18.0 | << | Extensive education and/or training may be required |
| Engineering and Technology | 5.7 | 10.8 | 10.2 | 0 | Current knowledge level may be sufficient |
| Building and Construction | 4.0 | 10.3 | 3.4 | << | Extensive education and/or training may be required |
| Design | 5.2 | 9.2 | 11.2 | > | Current knowledge level is likely sufficient |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 82

Focus Occupation: Machinists (51-4041)

Associated Occupation: Maintenance Workers, Machinery (49-9043)

| Associated Occupation's Key Skills Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | | Evaluation of Focus Occupation |
|---|---------------------------------|--------------------------------|---------------------------|----|--|
| Equipment Maintenance | 3.5 | 11.9 | 9.3 | < | A higher skill level may be required |
| Operation Monitoring | 6.6 | 11.9 | 12.0 | 0 | Current skill level may be sufficient |
| Repairing | 3.4 | 11.8 | 8.5 | << | Extensive development of skills in this area may be required |
| Troubleshooting | 4.5 | 11.0 | 10.2 | 0 | Current skill level may be sufficient |
| Operation and Control | 5.4 | 10.6 | 11.1 | 0 | Current skill level may be sufficient |
| Quality Control Analysis | 5.9 | 10.0 | 12.6 | > | Skill level is likely sufficient |
| Equipment Selection | 3.3 | 8.5 | 8.6 | 0 | Current skill level may be sufficient |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

| Abilities | | Similarity of Focus Occupation to Associated Occupation: 86 | | | |
|---|---------------------------------|---|---------------------------|--------------------------------|--|
| Focus Occupation: Machinists (51-4041) Associated Occupation: Maintenance Workers, Machinery (49-9043) | | | | | |
| Associated Occupation's Key Abilities Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation | |
| Arm-Hand Steadiness | 6.8 | 10.7 | 11.0 | 0 | Current ability level may be sufficient |
| Visualization | 7.5 | 10.0 | 10.1 | 0 | Current ability level may be sufficient |
| Reaction Time | 4.8 | 8.4 | 10.1 | > | Current ability level is likely sufficient |
| Static Strength | 5.0 | 8.4 | 7.7 | 0 | Current ability level may be sufficient |
| Extent Flexibility | 4.8 | 7.9 | 8.3 | 0 | Current ability level may be sufficient |
| Rate Control | 3.8 | 7.1 | 8.6 | > | Current ability level is likely sufficient |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

| Activities that Both Occupations Have in Common | | Similarity of Focus Occupation to Associated Occupation: 64 |
|---|-------------------------|---|
| Focus Occupation: Machinists (51-4041) Associated Occupation: Maintenance Workers, Machinery (49-9043) | | |
| Work Activities | Exclusivity of Activity | |
| Fabricate, assemble, or disassemble manufactured products by hand | 11 | |
| Install equipment or attachments on machinery or related structures | 48 | |
| Load or unload material or workpiece into machinery | 34 | |
| Maintain or repair industrial or related equipment/machinery | 39 | |
| Move or fit heavy objects | 8 | |
| Read specifications | 23 | |
| Understand technical operating, service or repair manuals | 6 | |
| Use hand or power tools | 2 | |
| Use knowledge of metric system | 39 | |

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

| Tools and Technologies that Both Occupations Have in Common | Similarity of Focus Occupation to Associated Occupation: 86 |
|---|---|
|---|---|

Focus Occupation: Machinists (51-4041)
Associated Occupation: Maintenance Workers, Machinery (49-9043)

| Tools and Technologies | Exclusivity |
|---|--------------------|
| Bandsaws and accessories | 26 |
| Computers | 1 |
| Content authoring and editing software | 1 |
| Cutting and crimping and punching tools | 3 |
| Cutting tools | 18 |
| Face and head protection | 7 |
| Forming tools | 2 |
| Holding and clamping tools | 3 |
| Ladders and scaffolding | 6 |
| Length and thickness and distance measuring instruments | 2 |
| Lifting equipment and accessories | 3 |
| Machine tools | 7 |
| Machinery for working wood and stone and ceramic and the like | 12 |
| Measuring and layout tools | 3 |
| Metal bending and forming machinery | 17 |
| Pneumatic tools | 8 |
| Power tools | 2 |
| Rough and finishing tools | 5 |
| Soldering and brazing and welding machinery and supplies | 6 |
| Special tooling fixtures | 16 |
| Tool attachments and accessories | 12 |
| Vision protection and accessories | 3 |
| Wrenches and drivers | 2 |

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.